Is 70,000 barrels a day a possibility for the oil spill?

Posted by Gail the Actuary on May 14, 2010 - 10:15am
Topic: Environment/Sustainability
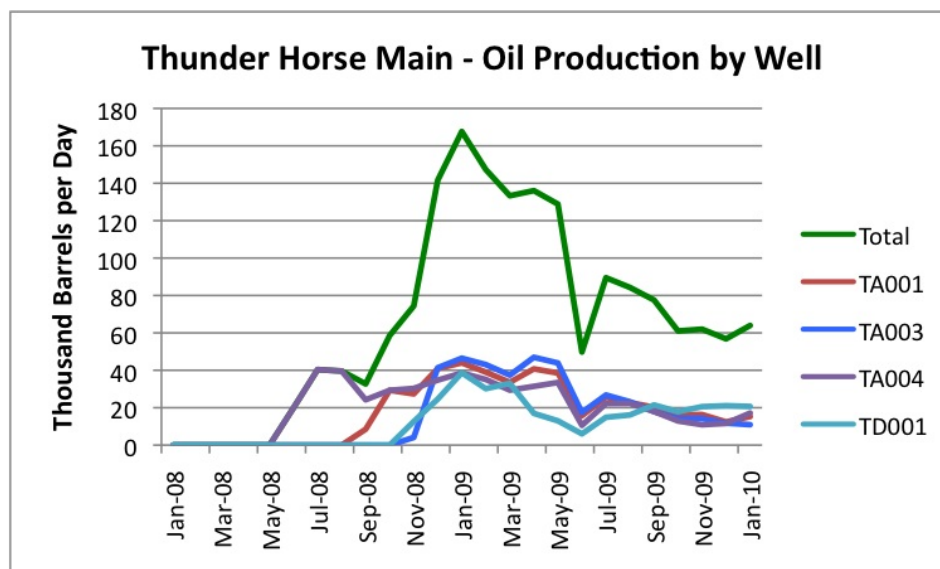Tags: deepwater horizon, oil spill [list all tags]

NPR is now reporting that the oil spill could be 70,000 barrels of oil a day, which is considerably greater than the estimate of 5,000 barrels per day currently being reported. What is the view of Oil Drum readers regarding the likelihood of the higher estimate being accurate? According to the story:
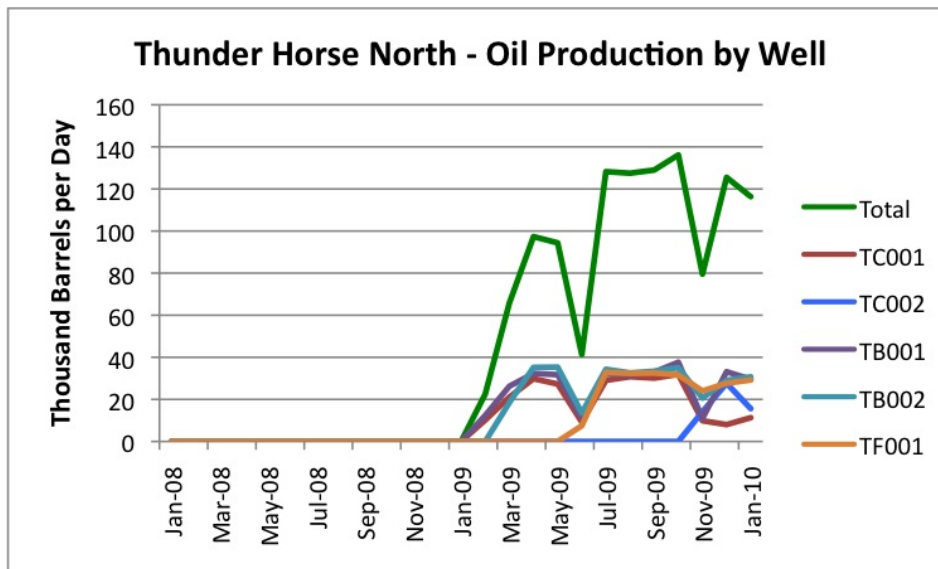
> The analysis was conducted by Steve Werely, an associate professor at Purdue University, using a technique called particle image velocimetry. Harris tells Michele Norris that the method is accurate to a degree of plus or minus 20 percent. That means the flow could range between 56,000 barrels a day and 84,000 barrels a day.
>
> Another analysis by Eugene Chiang, a professor of astrophysics at the University of California, Berkeley, calculated the rate of flow to be between 20,000 barrels a day and 100,000 barrels a day.

We also know that the oil tends to mix with water to produce a "chocolate mousse" mixture. The controlled flow rates of wells drilled by BP's at its Thunder Horse platform (another deep water platform) seemed to produce oil of 40,000 to 50,000 barrels a day, when the wells were in maximum production based on the graphs below from this post:

Thunder Horse Main - Oil Production by Well, in Thousand Barrels per Day, based on data of Minerals Management Services

Thunder Horse North - Oil Production by Well, in Thousand Barrels per Day, based on data of Minerals Management Services

Natural gas production is in addition to the oil production shown on these graphs, bringing the barrel of oil equivalents up somewhat (10% - 15%) from this level. This Deepwater Horizon well is different, so this may not have particular relevance.

What are readers views on the likelihood of higher oil spill estimate being correct?